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3/10/89

THE CHRONICLE of Higher Education.

March 1, 1989 • $2
Volume XXXV, Number 25

News Summary

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Research psychologists say the negative emotional consequences of abortion are slight, while the Surgeon General says the evidence is inconclusive. Page A4.

Participants in a workshop on scientific misconduct debated whether scientists who lie about research should be prosecuted. Page A5.

Black American men continued in 1987 to earn fewer doctoral degrees than in the year before. Page A11.

Congress's practice of earmarking money for specific campuses has not achieved the legislators' avowed goals. Page A17.

As part of its crackdown on for-profit trade schools, the government has moved against three top recipients of federal aid. Page A17.

The U. of Chicago and Argonne National Laboratory have formed a fund to develop and market their scientists' inventions. Page A23.

North Carolina State U. officials were pleased by a publisher's decision not to print a book that alleged wrongdoing in the men's basketball program there. Page A26.

As new freedoms take root in South Korea, students are turning their attention to reforming the country's universities. Page A27.

Brazil's academic community has been stunned by austerity measures proposed by the government. Page A27.

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FREEDOM OF EXPRESSION IMPERILED

Scholars and Academic Organizations Join Condemnations of Death Threat to Novelist

By CAROLYN J. MOONEY

The furor surrounding Ayatollah Ruhollah Khomeini's death threat against the writer Salman Rushdie spread to academe last week. Several groups defended the novelist's rights, professors organized informal readings, and campus bookstores scrambled to order more copies of the book that started it all.

Mr. Rushdie's novel, *The Satanic Verses*, has prompted violent protests in the Islamic world and has angered many Muslims, who consider it blasphemous. After the Ayatollah called for Mr. Rushdie's execution, the writer canceled a U.S. tour that included visits to at least four university campuses, and reportedly went into hiding in Britain.

Several large bookstore chains quickly ordered all copies of the novel removed from the shelves of their stores. However, Barnes & Noble Bookstores later announced it had asked the nearly 200 campus stores that it operates to consult with their institutions and decide themselves whether to offer the book. Several days later, the company announced it would resume selling the book in all its stores.

'Without Modern Parallel'

To many observers in academe and outside, the events surrounding Mr. Rushdie's novel were seen as the biggest threat to freedom of expression in recent history.

"The assault against this book and its author is without modern parallel," said a statement issued by the American Association of University Professors, which monitors academic freedom at higher-education institutions. "In the view of the A.A.U.P., those governments that have banned Salman Rushdie's book, publishers who have stopped its publication, and booksellers who have suspended its sales, have dishonored themselves in turning to censorship."

The executive council of the Modern

Continued on Page A14

'Electrocopies' Seen Surpassing Photocopies as Threat to Copyright

By JUDITH AXLER TURNER

BOSTON

"Electrocopying"—the reproduction of printed material in electronic form—may become a greater challenge to copyright than photocopying, publishers have been warned.

Timothy B. King, vice-president and director of publishing operations at John Wiley & Sons, said at a meeting here that the problem is one of copying from copies. "Photocopying stops there," he said. "Electrocopying goes on and on."

Electronic copies, he said, can be reproduced easily, often just by touching a few keys on a computer keyboard, without the inconvenience of finding a copying machine or of taking the original out of circulation. Copies can be sent across the country on computer networks or reproduced hundreds or thousands of times with simple computer commands. If the copy has been stored on a video disk as a picture, a laser printer can produce a paper version that will look exactly like the original. If the copy has been scanned by an optical-

Continued on Page A16

Faculty Members Wary of Efforts to Redefine Tenure Policies

Tenure is alive and well on most campuses, but its supporters are worried by some colleges' efforts to revise their policies. Page A10.

Tuition Seen Likely to Outpace Inflation for 9th Straight Year

Fee increases of 7 pct. to 10 pct. already revealed by many colleges

By JEAN EVANGELAUF

College tuition is likely to rise faster than the rate of inflation next fall, according to early reports.

While national figures will not be available until August, many colleges are announcing increases ranging from 7 per cent to 10 per cent, and a few are raising their tuition by 15 per cent or more.

In each of the last eight years, the increase in tuition has exceeded inflation as measured by the Consumer Price Index. Last year, consumer prices rose 4.4 per cent, compared with a 7-per-cent jump in tuition. While the federal government expects consumer prices to edge up about 5 per cent in 1989, a sharp 0.6-per-cent rise in consumer prices in January indicates inflation is worsening.

'Another Big Year'

In the last several years tuition has also outpaced the Higher Education Price Index, which measures the "market basket" of goods and services purchased by colleges and universities.

"It's another big year for tuition increases, there's no doubt about that," said A. Lee Fritschler, president of Dickinson College, where tuition will rise 9.5 per cent, to $13,300.

"We consider ourselves competitors in the most competitive industry in America. We compete for students and faculty and for funds from alumni, the government, and from foundations. What drives us most is putting our institutions in the best possible condition to compete in terms of programs and quality."

Analysts who follow tuition trends say they are not surprised by the increases, and add that they believe costs will contin-

Continued on Page A25

High-School Graduates: Some States Face Sharp Drop; Others, Big Growth

By MARY CRYSTAL CAGE

Like anxious passengers on a roller-coaster ride, state higher-education officials are bracing themselves for both sharp drops and dramatic climbs in the number of high-school graduates in the next decade.

The projected enrollment changes are raising a series of touchy political issues. In states with booming populations, college officials say they desperately need more money at a time when state coffers are facing countless demands. In states with declining populations, college officials must either attract new students or face the prospect of cuts in state support.

Overshadowing the consideration of the enrollment changes is the belief that many states did not plan well for such shifts in the past. "We played it all wrong back in 1979 and '80," says James M. Alessio, assistant director of research and information systems

Continued on Page A18

Officials at the U. of Texas at Austin hope to cut enrollment to about 46,000. At right, the campus's Jester Center.

PHOTOGRAPH FOR THE CHRONICLE BY BLAINE PENNINGTON

MARGINALIA

Headline in the *Arizona Daily Star*:

BUSH WORSHIPS, MEETS WITH ACADEMICIANS

That's our Education President!

■

Notice in the University of Pittsburgh's *Pitt News*:

"*The Pitt News* encourages its readers to notify the paper of any errors contained in stories or photograph description. Please use the adress and/or phone numbers listed below, or stop by our offices from 9 a.m. to 5 p.m. each weekday."

Pssst!

■

From the *Harvard Alumni Gazette*:

"The growth of courses has been reflected in the changing shape of the catalog. Margaret Law, registrar, said that in 1983-84, the format changed from 5½ inches by 8 inches to its present 6 by 9 inches to accommodate the growth in course listings.

"She adds that this year's courses, for the first time in recorded history, did not grow in size by 6 percent as it has over the past decade.

"'But that's not because there are fewer courses,' said Law. 'It's that we cut down on cross listings and really monitored the length of course descrip-'"

That's *one* way to do it.

■

The University of Guelph, in Ontario, sent out a memo to college and university housing officers announcing a vacancy for a residence-life director, with this note:

"I must also inform you that because of Canadian Employment and Immigration legislation, I can only interview candidates who are Canadian citizens or permanent residents of Canada. Should I not find a suitable canadidate I can then interview others."

■

We're told that when the academic-affairs committee at North Central Bible College was considering a name for a new course, Math 125, it wanted to take due note of the fact that the course would welcome students from many programs: behavioral sciences, associate in arts, cross-cultural ministries (ethics), theology, education, music, communications, sign language, undeclared, Christian studies, mathematics, and junior college. The department chairman suggested "Behaviorally associated ethnotheoeducomusicocommunicably-signed undeclared Christian Math 125, Jr."

■

We're grateful to the *Federal Register* for this thought for the day:

"Dissemination is a notworking process." —C.G.

In Brief

2 Law Schools Bar FBI Recruiters

Law schools at both the University of Michigan and the Ohio State University have banned recruiters from the Federal Bureau of Investigation because of a U.S. judge's finding last autumn that the agency systematically discriminated against its Hispanic agents.

The deans of both law schools said their universities had policies that prohibit the use of recruiting facilities by employers who discriminate. However, Ohio State will allow the agency to recruit its students off the campus and to distribute literature to them.

The move by the law schools followed Judge Lucius D. Bunton's ruling that the F.B.I. denied promotions to its Hispanic agents and detailed them to the least rewarding and most hazardous assignments.

6 Protest Animal Lab by Climbing Crane

Six people climbed a 160-foot construction crane at the University of California at Berkeley last week and said they would not come down until the university agreed to abandon work on a new animal-research laboratory.

University officials said they would not negotiate with the protesters.

The three men and three women remained atop the crane on the site of a new six-story genetics and plant biology building, which is adjacent to the target of their protest, the $14-million Northwest Animal Facility. Work was being delayed on both projects because of the demonstration, university officials said.

The protesters defied repeated orders to abandon their perch and demanded that the university halt construction of the laboratory, which they said would increase animal abuse.

New York Public Library Selects Healy as President

GEORGETOWN U.

After 13 years as president of Georgetown University, the Rev. Timothy S. Healy (*above*) will leave this summer to become president and chief executive officer of the New York Public Library.

The library's trustees announced the appointment last week. Father Healy will replace Vartan Gregorian, who has been named president of Brown University.

Georgetown is forming a search committee of trustees, administrators, faculty members, and students to select a new president. Father Healy will assume his responsibilities at the library after his successor is found, a Georgetown spokeswoman said.

Science-Teaching Report Stresses Thinking

The American Association for the Advancement of Science has released a report intended to change the way mathematics and science are taught in the schools during the next decade.

The report, "Science for All Americans," says that literacy in science, mathematics, and technology "has emerged as a central goal of education."

However, the report says such literacy "eludes us" in the United States.

Among other recommendations, the report says students should concentrate more on developing thinking abilities and less on memorizing details. It urges teachers to focus on "connections"—the way one subject area relates to others.

The report is the first phase of Project 2061, the association's effort to revamp science and mathematics education from kindergarten through high school (*The Chronicle*, February 8). It is available for $14.50 from A.A.A.S. Books, Department 2061, Box 753, Waldorf, Md. 20604.

Archbishop Tutu Seeks Seat on Harvard Board

South African Archbishop Desmond Tutu, an outspoken critic of American investments in companies that do business in South Africa, has agreed to run for a position on Harvard University's Board of Overseers.

Archbishop Tutu, who won the Nobel Peace Prize in 1984, has criticized Harvard's South Africa–related investments on several occasions. He will run on a slate of candidates nominated by the Harvard-Radcliffe Alumni/ae Against Apartheid, a pro-divestment group.

Said Robert P. Wolff, a professor of philosophy at the University of Massachusetts at Amherst who is head of the alumni group: "I think it's terribly important that someone of Tutu's stature—which, in an instance like this, is much greater than [Harvard President Derek] Bok's stature—should not simply speak out but should be willing actively to involve himself in the life of the university in order to lead Harvard into the light."

The 30-member Board of Overseers advises the university's other governing body, the Harvard Corporation. All of the university's graduates are eligible to vote in the election, which will be held by mail. Results will be announced in June.

What They're Reading on College Campuses

		Previous Survey
1.	The Bonfire of the Vanities, by Tom Wolfe	2
2.	Trump: the Art of the Deal, by Donald J. Trump with Tony Schwartz	—
3.	The Essential Calvin and Hobbes, by Bill Watterson	1
4.	All I Really Need to Know I Learned in Kindergarten, by Robert Fulghum	7
5.	The Accidental Tourist, by Anne Tyler	—
6.	Chaos, by James Gleick	—
7.	The Dictionary of Cultural Literacy, by E. D. Hirsch, Jr., Joseph F. Kett, and James Trefil	6
8.	The Tommyknockers, by Stephen King	3
9.	Beloved, by Tom Morrison	5
10.	The Shell Seekers, by Rosamunde Pilcher	—

The Chronicle's list of best-selling books was compiled from information supplied by stores serving the following campuses: American U., Baylor U., Bucknell U., Carleton College, Carnegie Mellon U., Case Western Reserve U., Central Michigan U., Denison U., Idaho State U., Indiana U., Kent State U., Lawrence U., Lehigh U., Mankato State U., Montana State U., Pennsylvania State U., Portland State U., Princeton U., Stanford U., Tarrant County Junior College, Tulane U., U. of Alaska at Anchorage, U. of California at San Diego, U. of Hawaii, U. of Iowa, U. of Maryland-Baltimore County, U. of Missouri at Columbia, U. of Nebraska at Lincoln, U. of New Orleans, U. of Notre Dame, U. of Pittsburgh, U. of Puget Sound, U. of Virginia, U. of Washington, U. of Wisconsin at Madison, U. of Wisconsin at Milwaukee, Xavier U. (Ohio), and Weber College.

Reports covered sales of hardcover and paperback trade books in January.

Southern Ill. Faculty, Staff Divide in 2 Union Votes

Professional-staff members at Southern Illinois University at Edwardsville voted last week to form a union affiliated with the National Education Association. At the same time, faculty members there chose by a small margin not to be represented by a union.

The professional-staff members, who voted 129 to 85 to unionize, had voted on unionization three months ago. However, all the ballots from the first election were impounded by the state labor board because of challenges over who should be included in the bargaining unit.

Faculty members were voting for a second time, too, because no group had won a clear majority in the first election. In last week's run-off between an N.E.A.-affiliated union and no representative, the faculty voted 220 to 207 not to affiliate.

Faculty and professional-staff members at the university's Carbondale campus and faculty members at the medical school had also voted several months ago not to unionize.

Editorials on Israel Prompt Michigan Protests

ROBERT CHASE/THE NEW YORK TIMES

More than 175 students rallied last week at the University of Michigan at Ann Arbor (*above*) to protest what they said were anti-Semitic editorials in the student newspaper.

In recent weeks, the *Michigan Daily* had published several editorials critical of Israel, including one suggesting that Israel may have been responsible for the bombing of Pan American Airways Flight 103 in December. The

The Chronicle of Higher Education (ISSN 0009-5982) is published weekly except the last two weeks in August and the last two weeks in December, at 1255 Twenty-Third Street, N.W., Washington, D.C. 20037. Subscription rate: $55 per year. Second-class postage paid at Washington, D.C., and at additional mailing offices. Copyright © 1989 by The Chronicle of Higher Education, Inc. Printed in the United States of America. POSTMASTER: Send address changes to The Chronicle of Higher Education, P.O. Box 1955, Marion, Ohio 43305. Member, Audit Bureau of Circulations. The Chronicle reserves the right not to accept an advertiser's order. Only publication of an advertisement shall constitute final acceptance of the advertiser's order.

really asking for trouble," says Zelda Gamson, director of the New England Resource Center for Higher Education at the University of Massachusetts at Boston.

"An institution without a tenure system would be a lot less desirable," adds Ms. Gamson, who is also a professor of sociology at the university. "Tenure is something faculty really cherish."

The fundamental goals of tenure are to safeguard academic freedom and to provide a measure of job security to faculty members, according to the A.A.U.P.'s associate general secretary, Jordan E. Kurland. The first formal statement on tenure was made in 1915, when the A.A.U.P. was founded.

Effects of Faculty Shortage in 1990's

For the most part, tenure is alive and well at the vast majority of colleges and universities, according to higher-education officials interviewed on the issue. In fact, the system will probably be strengthened, they say, as large numbers of faculty retirements force colleges to compete vigorously for applicants.

Most experts on higher education are predicting a faculty shortage in the 1990's, which may be exacerbated by a shrinking pool of U.S. doctoral-degree recipients (*The Chronicle*, January 25).

"My feeling is that the faculty shortage will make tenure more secure because the bargaining power of those who are being sought will be enhanced," says Walter P. Metzger, a professor of history at Columbia University and a member of the A.A.U.P.'s Committee A on Academic Freedom and Tenure. The committee studies and interprets tenure policies, and investigates cases in which it believes institutions may be departing from the association's tenure guidelines.

Despite the generally healthy state of tenure, aggressive advocates of tenure say they are concerned by what they perceive to be indirect attacks on the tenure system.

Probationary Period Lengthened

Among the changes that have generated controversy have been the hiring of more part timers and other faculty members who are not eligible for tenure, the use of post-tenure evaluations that can result in dismissal, and the lengthening of the traditional seven-year probationary period before a person can receive tenure.

"A frontal attack on tenure is not being waged, because that could get institutions in trouble," says Mr. Metzger. "But institutions have been nibbling at the edges."

Gene B. Bledsoe, higher-education coordinator for the National Education Association, agrees.

"We used to see a lot of frontal assaults on tenure in the 70's, but now administrators are trying to circumvent the system by hiring more part timers and non-tenure-track faculty," he says. "On some campuses, they're also raising the standard for attaining tenure so that few people qualify."

Among the institutions that have longer-than-average probationary periods is Yale University, which typically reviews a faculty member for tenure in the eighth or ninth year. The A.A.U.P.'s guidelines, which are followed by the vast majority of four-year institutions and virtually all large research universities, call for tenure reviews no later than the sixth year.

Charles H. Long, Yale's deputy pro-

Continued on Following Page

Doctoral Degrees Earned by U.S. Citizens, 1977 to 1987

	American Indian		Asian		Black		Hispanic		White	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1977	43	22	251	88	684	432	310	113	17,011	6,054
1978	50	10	287	103	584	449	317	156	15,573	6,238
1979	56	25	311	117	551	505	308	154	15,261	6,659
1980	46	29	313	145	499	533	256	156	14,848	7,145
1981	56	29	315	150	499	514	275	189	14,458	7,521
1982	44	33	281	171	483	564	344	191	13,984	7,689
1983	50	30	312	180	412	509	288	250	13,599	8,074
1984	53	20	338	174	427	526	313	222	13,155	8,168
1985	39	56	329	187	379	533	300	261	12,778	7,926
1986	58	41	347	180	321	499	299	268	12,257	8,281
1987	63	53	367	173	317	448	332	266	12,116	8,245

SOURCE: NATIONAL RESEARCH COUNCIL

Decline in Doctorates Earned by Black and White Men Persists, Study Finds; Foreign Students and U.S. Women Fill Gaps

By DENISE K. MAGNER

Black American men earned slightly fewer doctoral degrees in 1987 than in the year before, sustaining a decade-long decline that saw the number of doctorates awarded to them fall by 54 per cent.

A new survey of doctoral recipients at U.S. institutions shows that the number of degrees awarded to American men, overall, fell by 28 per cent from 1977 to 1987, the most recent year for which statistics are available.

A report on the survey, conducted by the National Research Council, is scheduled for release in the next few weeks.

Total Up by 500 Over 10 Years

The greatest proportional drop occurred among U.S. black men, who earned 317 doctorates in 1987, compared to 684 in 1977. The number of white American men receiving doctoral degrees also dropped significantly—from 17,011 in 1977 to 12,116 in 1987. Research doctorates earned by American men with Asian, Hispanic, or American Indian backgrounds increased, although their numbers remained low.

While fewer American men earned Ph.D.s, the total number of students receiving doctorates at the nation's universities increased by about 500 students, to 32,278 in 1987.

Foreign students and American women filled the gaps created by the decline in American men earning doctorates, said Lori Thurgood, research associate at the National Research Council.

Students with temporary or permanent visas earned 22.2 per cent of the doctorates awarded in 1987, compared to 15.2 per cent in 1977. During that time, the share of doctorates earned by U.S. citizens fell from 82.4 to 70.8 per cent.

The total number of women earning doctorates rose by one-third, to 11,370 in 1987. A greater proportion of those receiving doctoral degrees were women—up from 25 per cent in 1977 to 35 per cent in 1987.

Ms. Thurgood noted, however, that the proportion of doctorates earned by women has stalled at about 35 per cent since 1984.

While the number of white American women receiving doctorates rose 36 per cent from 1977 to 1987, the number of black American women getting doctorates grew only 4 per cent, and actually declined in 1986 and 1987.

Many of the statistics come as little surprise to university leaders, and serve only to reinforce trends to which they have been alerted in recent years.

'Dangerous State of Decline'

Several explanations are offered for the decline in doctorates earned by American men, and blacks in particular, including deficiencies in earlier education and market trends that offer higher salaries for jobs outside higher education.

Said Charles U. Smith, dean of graduate studies at Florida A & M University: "The black male appears to be in a dangerous state of decline" in both academe and society at large. He laid part of the blame on the Reagan Administration for cutbacks in financial aid for graduate education and ef-

Continued on Page A15

Teacher Educators Told to Stress Both Pedagogy and Subject Matter

ROBERT COHEN

Frank Murray: "We know a lot more about teaching in a scientific way. The knowledge base is a lot more interesting than it used to be."

By BEVERLY T. WATKINS

ANAHEIM, CAL.

Schools of education must make knowledge about subject matter and pedagogy equally important in the preparation of future schoolteachers, says a book being released here this week.

All beginning teachers, regardless of the level at which they plan to work, must have a solid understanding of disciplinary content, teaching methods, and student behavior, as well as of the interaction among all those elements, to be successful in the classroom, says the book, which covers the knowledge that a group of well-known educators and researchers consider essential for new teachers.

Also, the book says, teacher educators should not rely entirely on professors in the disciplines to teach subject matter to prospective schoolteachers, because, it says, there are fundamental differences between scholarly knowledge and the spe-

Continued on Page A16

UNIVERSITY OF MINNESOTA

William E. Gardner: The book is "a major statement of what the knowledge base is, a place to go to see the elements for the content of teacher-education programs."

FACT FILE: Median Salaries of Administrators in 'Secondary' Positions

The following table is a companion to the Fact File of primary administrators' salaries that appeared in *The Chronicle*, February 15. The report of the salary survey was written by Richard C. Creal of the College and University Personnel Association, along with John M. Toller, personnel director at the University of Connecticut, and Jan P. Miller of the NASA Industrial Applications Center at the University of Pittsburgh.

The figures, based on reports from 1,268 colleges and universities, are intended to give only a broad picture of administrative salaries for 1988-89. Comparative analyses between positions or among institutions are available in the full report, or through special studies that may be purchased from the personnel association.

Copies of the report, *1988-89 Administrative Compensation Survey*, may be obtained from the College and University Personnel Association, 1233 20th Street, N.W., Suite 503, Washington 20036; (202) 429-0311.

The price is $55 for association members, $140 for non-members who participated in the survey, and $250 for all other non-members.

	All institutions	1-year change	Doctoral	Comprehensive	Baccalaureate	2-year
Executive						
Assistant to president of a system	$57,240	+ 14.5%	$64,000	—	—	$44,495
Assistant to president of a single institution	42,000	+ 4.1%	57,651	$44,380	$35,124	37,800
Academic						
Director, conferences	35,000	+ 8.2%	44,030	36,000	26,780	34,291
Circulation librarian	25,666	+ 6.0%	31,876	26,515	20,950	25,000
Acquisitions librarian	29,528	+ 7.8%	36,800	29,480	24,843	30,906
Technical services librarian	29,185	+ 5.1%	46,343	31,323	24,600	27,544
Public services librarian	31,545	+ 5.1%	47,000	32,485	25,200	31,200
Reference librarian	27,500	+ 6.2%	37,000	28,600	24,548	27,895
Associate director, institutional research	36,011	+ 4.7%	43,048	35,804	20,150	33,057
Associate director, computer center, academic	37,949	+ 2.6%	50,268	37,800	26,950	—
Administrative						
Director, health and safety	38,740	+ 5.4%	49,635	34,200	25,000	—
Director, telecommunications	39,000	+ 6.2%	49,400	36,000	23,412	36,740
Associate budget director	39,600	+ 7.4%	46,000	35,700	31,500	30,570
Associate general counsel	48,833	+ 6.2%	48,833	—	—	—
Associate director, personnel	34,476	+ 1.5%	44,194	32,765	24,650	33,434
Manager, benefits	29,000	+ 4.8%	37,284	26,491	22,456	27,381
Manager, training and development	33,771	+ 4.1%	35,368	29,400	—	—
Manager, employee relations	35,462	+ 4.2%	37,355	32,355	—	—
Manager, labor relations	47,652	+ 17.4%	43,100	—	—	—
Manager, employment	28,890	+ 3.8%	34,100	26,000	3,050	27,745
Manager, wage and salary	32,823	+ 2.6%	35,443	28,260	18,938	—
Manager, personnel information systems	33,600	+ 8.4%	37,000	25,132	—	—
Associate director, affirmative action	32,355	+ 7.8%	32,549	—	—	—
Associate director, computer center	38,957	+ 5.9%	56,070	40,446	30,480	35,003
Data base administrator	38,148	+ 1.7%	43,000	36,070	26,500	33,500
Systems analyst, highest level	35,000	+ 4.9%	37,796	35,484	29,238	32,914
Systems analyst, lowest level	27,408	- 1.0%	29,004	26,623	22,100	27,759
Programmer analyst, highest level	28,992	+ 5.0%	31,838	28,870	25,000	28,992
Programmer analyst, lowest level	23,633	+ 4.8%	24,600	23,823	22,000	22,755
Associate director, computer center, administrative	38,370	+ 0.6%	50,940	40,950	28,700	31,326
Associate director, physical plant	35,633	+ 4.3%	51,000	36,300	26,810	31,713
Manager, landscape and grounds	27,250	+ 5.4%	35,408	27,500	23,200	25,680
Manager, building and maintenance trades	31,197	+ 6.4%	39,100	30,000	26,700	27,774
Manager, technical trades	33,867	+ 8.8%	36,600	31,500	28,239	30,280
Manager, custodial services	27,000	+ 6.3%	34,596	27,700	23,266	24,889
Manager, power plant	34,400	+ 5.2%	39,544	34,000	29,432	28,188
Manager, payroll	26,950	+ 4.5%	37,500	27,474	20,820	23,760
Staff accountant, highest level	26,112	+ 4.5%	29,444	27,000	22,500	25,608
Staff accountant, lowest level	21,557	+ 7.5%	22,250	21,760	19,000	22,340
Associate bursar	27,600	+ 3.0%	35,150	24,538	20,000	—
Associate director, purchasing	30,094	+ 2.7%	39,300	28,370	—	23,550
Associate director, bookstore	23,000	+ 5.7%	29,589	22,470	16,950	20,316
Manager, mail services	20,400	+ 4.6%	27,036	20,845	15,715	19,548
Director, medical center public relations	48,000	+ 1.9%	49,000	—	—	—
Director, medical center personnel	54,996	+ 12.8%	55,100	—	—	—
External affairs						
Director, annual giving	32,100	+ 5.0%	42,101	33,516	30,000	26,500
Director, corporate and foundation relations	38,500	+ 6.5%	49,381	38,500	32,500	34,000
Coordinator, resource development	26,361	+ 2.9%	31,600	26,361	23,000	—
Director, estate planning	40,643	+ 3.7%	53,166	39,000	37,800	—
Director, governmental relations	59,844	+ 4.9%	62,786	54,478	—	—
Associate director, publications	26,110	+ 10.3%	32,120	26,110	19,800	—
Manager, printing services	28,076	+ 4.1%	36,587	28,075	20,900	25,200
Student services						
Associate director, admissions	30,000	+ 8.6%	36,870	30,800	26,840	27,825
Assistant director, admissions	22,913	+ 7.4%	28,600	24,300	21,000	22,000
Associate registrar	29,807	+ 1.8%	37,600	30,597	23,244	27,983
Assistant registrar	24,180	+ 5.0%	28,461	25,500	19,589	24,000
Associate director, student financial aid	25,920	+ 5.9%	34,400	26,700	20,800	25,573
Associate director, food services	30,000	+ 4.3%	37,453	29,400	23,000	—
Associate director, student housing	26,617	+ 0.4%	38,757	25,850	19,968	—
Housing officer, administrative operations	29,887	+ 3.1%	35,500	25,850	20,000	—
Housing officer, residence life	24,000	+ 8.6%	34,500	25,000	18,800	22,629
Housing officer, family housing	30,864	+ 10.6%	31,350	—	—	—
Associate director, student union	29,378	+ 5.3%	35,196	28,851	21,959	—
Student union business manager	30,000	+ 7.8%	31,500	28,188	—	—
Associate director, student counseling	31,128	+ 1.6%	39,544	29,423	24,289	31,128

Note: A dash indicates insufficient data.

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Colleges Try to Redefine Tenure Policies, but Many Faculty Members Are Wary

Continued from Preceding Page

vost, says the main reason for waiting a few extra years is to give faculty members a chance to reach a level where they would be competitive when a tenure slot opens.

A national search is conducted whenever a tenured position becomes available, he says. "Most people four or five years out of graduate school are not going to be at a level in their profession where they could compete with the top scholars in their field," he adds.

Reasons for scrutinizing tenure vary from institution to institution. Many colleges that hired large numbers of faculty members in the expansive decade of the 60's now have 60 per cent to 80 per cent of their faculty members tenured.

Other institutions were alarmed by the prospect that tenured faculty members might go on working indefinitely after the mandatory-retirement age of 70 is lifted for faculty members. That change, in legislation passed by Congress in 1986, is slated to take effect in 1994. However, a recent study has shown that the expected change in the retirement age will have little effect on how faculty members plan for retirement (*The Chronicle*, February 15).

At some institutions, changes in the tenure system have been initiated by skeptical governing boards that take a dim view of the concept of lifetime tenure.

Seeking Flexibility

At Roberts Wesleyan College, trustees froze the granting of tenure for several years until administrators could come up with a more flexible alternative. The college's president, William C. Crothers, says he shared some of the trustees' concerns.

"One of the concerns I had was that, as a small college, we didn't have the flexibility that larger universities have," he says. "If you have a faculty member who isn't as productive as you would like, in a larger place you can find a position for him somewhere. We don't have the resources to do that."

Under his leadership, the college redefined tenure. The result is a system that is considerably more flexible than the traditional form of tenure advocated by the A.A.U.P., Mr. Crothers says.

To dismiss someone with tenure, he says, the college need not prove gross misconduct, as called for in the A.A.U.P. guidelines. Instead, it must simply show evidence of consistently low evaluations by students, peers, and administrators. Those evaluations are continuous for faculty members—as well as for administrators.

A Way to Insure Vitality

Faculty members who are viewed as having trouble are required to meet with a "faculty-relations committee" (made up of Mr. Crothers, the vice-president for academic affairs, and two senior faculty members) and to come up with specific steps to improve their performance in two years. If they fail to improve they can be dismissed, even if they have tenure.

However, Wayne G. McCown, vice-president for academic affairs, says he is unaware of any cases where someone was actually fired as a result.

Mr. Crothers says the system is an effective way to insure vitality at a small college. (At Roberts Wesleyan, this year's enrollment is around 750.) "If people aren't pulling their weight, they stick out like a sore thumb and we can work with them," he says.

"I think we all need assessment on any level," adds Mr. Crothers, who himself is evaluated every two years.

Gordon College has had what it calls "a system of faculty-growth contracts" since 1976. About 70 per cent of the college's faculty members participate in the voluntary program, which is not tied to tenure or promotion, according to R. Judson Carlberg, dean of the faculty.

"Because we had little turnover in the faculty and a faculty that were moving on in years, we needed a way to infuse them with new ideas and excitement," he says. "We thought about tinkering with the tenure process, and we've come to a conscious choice not to."

Advocates of evaluations that take place after a person has tenure—

4 Colleges Try Alternatives to Tenure

Continued from Page A10

ulty members whom it might otherwise lose if a tenured position were not open.

Azusa Pacific University replaced tenure with a system of contracts, after the college's board of trustees put a moratorium on tenure five years ago. Faculty members typically are eligible for three or more one-year contracts, followed by two three-year contracts and a five-year contract.

The university made the change because it wanted more flexibility, according to Don Grant, vice-president for academic affairs. "We were getting more and more tenured in fields that are not all that assured a future," he says. "This is a way to keep improving and assuring growth. We look at it as a positive change."

The change didn't go over well with some faculty members who accepted what they thought were tenure-track positions at Azusa Pacific. But they seem to have got used to the idea. "There is no grumbling in the ranks now," says David D. Cherney, a professor of biology and chairman of the Department of Science. Mr. Cherney served on a committee that studied the tenure issue several years ago.

The University of Texas of the Permean Basin is in the process of going in the opposite direction, replacing a system that granted tenure for a seven-year period with a more traditional system that grants it indefinitely. The switch is seen as a victory by faculty members who for years have been pushing for a traditional tenure system.

H. Warren Gardner, vice-president for academic affairs, says term tenure seemed like a good idea when the campus opened in 1973. "At the time the institution was opened, it was conceived as an innovative approach to periodically review people and to get away from the permanence of tenure," he says. Although the lack of a traditional tenure policy has not hurt recruiting efforts, administrators were concerned that it might in the future, he adds.

—KATHERINE S. MANGAN

Decline in Doctorates Earned by Black Men Is Found to Persist

Continued from Page A11

forts to dismantle affirmative-action advances.

Others said universities had done a poor job of selling the advantages of a career in teaching and research to American students. "A tremendous number of our brightest young people are now being attracted to master's in business administration or to professional degrees," said Robert L. Ringel, vice-president and dean of the graduate school at Purdue University. "Many professional schools have done an excellent job of marketing these careers. I don't think universities have done enough to show what a fantastic career opportunity is available by joining the faculty of an institution."

Need for More Fellowships Seen

Whatever the reason for the decline, several educators said the statistics reinforced the need for state and federal governments to finance more fellowships.

Robert M. Rosenzweig, president of the Association of American Universities, said fellowships offer practical and symbolic support to students by showing that society values professors and research.

A common misperception is that foreign students are displacing American students in graduate schools, but that is not the case, according to several officials. "Every time people ask me about the 'foreign-student problem,' I tell them that it's not the foreign-student problem, it's the U.S.-student problem," said Frank E. Perkins, dean of the graduate school at the Massachusetts Institute of Technology.

"With the declining interest among U.S. citizens in research doctorate programs, colleges have to keep the programs going, so they fill them up with foreign applicants. There is certainly no shortage of foreign applicants."

2 Categories of Foreign Students

Foreign students are classified in two categories in the research council's survey—those with temporary and those with permanent visas. The survey found that 75 per cent of those with permanent visas planned to seek employment or do postdoctoral work in the United States once they finished doctoral work. Meanwhile, about 48 per cent of those with temporary visas planned to remain in this country after earning their doctorate.

"We are getting the benefit of a large pool of labor that we don't have to educate from grade one through high school," Mr. Rosenzweig said. "I don't see that as a problem."

Dozens of universities have announced programs to increase the recruitment of minorities at the undergraduate level and to attract more of them to the teaching profession. M.I.T., for instance, offers a summer science program for undergraduates from the nation's black colleges. Florida A&M sends the names of top black students to graduate schools and asks the schools to reserve financial-aid packages for them. But most officials said it would be several years before they could assess whether the programs had resulted in more research doctorates for members of minority groups.

Graduate schools need to correct misunderstandings about doctoral work, said Clara Sue Kidwell, dean-in-residence at the Council of Graduate Schools and a professor of American Indian studies at the University of California at Berkeley. One misperception, she said, is that all graduate students are struggling to repay huge college costs in the face of low salaries. While students at professional schools may face a high debt burden once they graduate, most of those seeking doctorates finance their education through teaching and research positions, fellowships, and a limited number of federal grants, she said.

According to the survey, 54 per cent of the doctorate recipients said they faced no debt burden upon graduation. Of the 46 per cent who did, the average debt was about $7,000, which officials said is manageable.

"I think that where we really need to start grooming people for graduate school is at the high school level," said Ms. Kidwell. "Going to graduate school is a state of mind. You go because a subject excites you and you find out someone will pay you for studying it. We have to sell students early that learning can be fun and provide exciting opportunities."

New Computer Software for Higher Education

The following list of computer software has been compiled from information provided by the publishers or by companies marketing the programs. Prices are subject to change without notice. For information about specific applications and hardware requirements, contact the publishers or companies directly.

ACADEMIC COMPUTING

Analysis. "Lessons in Reading and Reasoning," for Amiga, Apple II series, Apple Macintosh, and I.B.M. PC series and compatibles. Four programs contain tutorials on evaluating written information; focus is on 20 logic fallacies such as rationalization, use of false authorities, loaded words, inadequate data, circular reasoning, and false analogies; $149.95. Contact: Queue, 562 Boston Avenue, Bridgeport, Conn. 06610; (800) 335-0808.

Chinese. "Cantonese," for I.B.M. PC series and compatibles. Tutorial in spoken Cantonese; $15. Contact: Louie Crew, Dragon Disks, P.O. Box 1545, Orangeburg, S.C. 29116; (803) 533-0017.

Computer science. "Fileops," for DEC VAX. Tutorial on file operations; $600; $300 for education institutions. Contact: Clearinghouse for Academic Software, Computation Center, 104 Computer Science Building, Iowa State University, Ames, Iowa 50011; (515) 294-0323.

Data management. "Tabularium," for Apple Macintosh. Requires "HyperCard." Allows user to transfer data from any data base to "HyperCard" stacks and vice versa; can handle large amounts of information; $49.95. Contact: All-American Software Development Corp., 5612 International Parkway, Minneapolis 55428; (612) 537-8910.

Engineering. "ACTON AUTOCAD TO NASTRAN Translator," for I.B.M. PC series and compatibles. Allows user to quickly generate small finite-element models for use with the NASTRAN finite-element modeling program; $200; documentation, $11. Contact: COSMIC, University of Georgia, 382 East Broad Street, Athens, Ga. 30602; (404) 542-3265.

Logic. "Truthtab," for Apple Macintosh and I.B.M. PC series and compatibles. Requires a Pascal compiler. Calculates and prints truth tables for expressions in two-valued or multiple-valued propositional logic; $40; "shareware" license comes with software. Contact: Edward G. Nilges, P.O. Box 16, Kingston, N.J. 08528.

Programming. "Virtual Frame Buffer Interface," for DEC VAX. Makes all frame buffers appear as a generic frame buffer with a standard specified set of characteristics, allowing programmers to write code that will run on all supported hardware without modification; converts generic commands to actual device commands; supports ADAGE IK3000, DEANZA IP8500, Low Resolution RAMTEK 9460, and High Resolution RAMTEK 9460 frame buffers; includes source code; $900; documentation, $24. Contact: COSMIC, University of Georgia, 382 East Broad Street, Athens, Ga. 30602; (404) 542-3265.

Signal processing. "MOSAIC," for DEC VAX. Requires array processor. Automated mosaicking algorithm for generating images from several Synthetic Aperture Radar passes; $600; documentation, $15. Contact: COSMIC, University of Georgia, 382 East Broad Street, Athens, Ga. 30602; (404) 542-3265.

Spanish. "Spanish Microtutor," I.B.M. PC series and compatibles. Tutorial for first-semester Spanish grammar; $15. Contact: College Department, Harcourt Brace Jovanovich Inc., 1250 Sixth Avenue, San Diego 92101; (800) 237-2665.

Writing. "The Writing Tutor," for I.B.M. PC series and compatibles. Tutorial and word-processing software to help students with "pre-writing" strategies such as tagmemics, topoi, heuristic questions, problem solving, freewriting, and drawing on personal experience; $16. Contact: College Department, Harcourt Brace Jovanovich Inc., 1250 Sixth Avenue, San Diego 92101; (800) 237-2665.

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Government & Politics

Ways & Means

Sen. Edward M. Kennedy, the Massachusetts Democrat who heads the Senate education committee, last week unveiled his plan to encourage high-school and college students to volunteer in their communities.

The legislation, which Mr. Kennedy is expected to introduce formally soon, avoids the controversial issue of linking community service to student aid. A bill recently introduced by Sen. Sam Nunn, the Georgia Democrat, has been harshly criticized by college officials because it would require students to serve in their communities or in the military before they could qualify for federal grants or loans to attend college.

Senator Kennedy's plan would authorize the federal government to spend about $500-million in grants over five years to help states begin community-service programs or to improve existing ones.

Mr. Kennedy, whose committee must consider any community-service legislation before it is approved by Congress, did not criticize Mr. Nunn's plan. But he said: "We do not have to compel young Americans to serve their country. All we have to do is ask and provide the opportunity."

■

Meanwhile, Senator Nunn said he was not interested in backing down from his plan to require students to serve before they could receive aid.

Some education officials have suggested that Congress maintain the current array of federal aid programs and simply allow students who serve to get extra money. But Mr. Nunn, appearing on Public Television's MacNeil / Lehrer NewsHour, said the federal government could not afford such an effort.

"We're not going to throw in the towel to the education establishment that wants to add this on to everything else, because we don't have the money to do that," he said.

■

President Bush took his own message on volunteerism to Washington University last month in what was his first speech to a college audience since he took office in January.

"From now on in America, any definition of a successful life must include serving others—in a child-care center, the corporate board room, in the Rotary, or Little League, or a tutoring program, or a church or synagogue," Mr. Bush told an audience of about 4,000.

Mr. Bush described his own proposal to encourage community service among young people—Youth Entering Service, or YES. Under that plan, federal and private funds would be distributed to state and local agencies that coordinate volunteer programs. The plan would not alter current student-aid programs. After his talk, Mr. Bush ate lunch with a group of students involved in volunteer activities.

Congressional Practice of Earmarking Research Grants Does Not Broaden Allocation of Funds, Study Finds

Some supporters of the process question the accuracy of the conclusions by U. of California analyst

By COLLEEN CORDES

A controversial new study from the University of California concludes that the Congressional practice of earmarking money for specific campuses is not an effective way to broaden the geographic distribution of federal funds for science and technology.

Many supporters of the practice have argued that the traditional system for deciding where to spend federal money—competitive reviews of merit—is biased and perpetuates the *status quo* of institutional and geographic "haves" and "have-nots."

They say that Congress, by earmarking money for specific campus projects, can make sure that the have-nots receive more of their fair share.

No one denies that the bulk of federal research support is concentrated in relatively few states and institutions. In fiscal 1987, for example, the universities in just five states spent 46 per cent of all federal research and development support. The geographic concentration has been of particular concern to many members of Congress, who believe that their states need such support.

But James Savage, principal federal relations analyst for the University of California system and the author of the new study, says the earmarking has had similar results, particularly in terms of concentrating money geographically.

(The University of California has long opposed earmarking on campus projects, and Mr. Savage found it had received $140,000 in earmarked funds in the last 10 years.)

"A handful of states and institutions receive these funds, and many of the states already are major recipients of federal academic research funds," Mr. Savage says in a statement explaining his study. "I call this double-dipping."

Some supporters of the practice, however, question the accuracy of Mr. Savage's statistics and his conclusions. They argue that even his numbers show that many of the institutions that received earmarked money otherwise obtain little federal support for research, and that many of them are in states that have not fared well in competitive merit reviews.

Observers on both sides of the debate, including Mr. Savage, say the study does point out the need for more systematic, effective ways to help states and institutions develop their capacity to compete for federal research money.

5 States Got 42 Per. of Money

Just five states received nearly 42 per cent of all the money that Congress earmarked for specific universities and colleges from fiscal 1980 through fiscal 1989, according to Mr. Savage's analysis.

Three of the five—Massachusetts, New York, and Illinois—are also among the top 10 in winning overall federal research and development support. Most of that money

Continued on Page A22

U.S. Acts to Suspend Aid to 3 Trade Schools; Critics Say It Isn't Being Tough Enough

By ROBIN WILSON

WASHINGTON

The federal government has taken action against three of the top recipients of federal student aid in recent months as part of a crackdown on for-profit trade schools.

Administration officials have been publicizing the actions, saying they are pleased with the tactics they are using. But critics say the Education Department has not been tough enough on the institutions, also known as proprietary schools, and that its recent action came only after years of ignoring problems at the schools.

"Finally, after months and months of horror stories about damaged students, false promises, and scandalous behavior on the part of some proprietary schools, the department is taking action," says Michael Lance, an aide to Republican members of the House Postsecondary Education Subcommittee.

Proprietary schools train students for a variety of jobs, ranging from computer technician to beautician to medical assistant. Over the last six months, the Education Department and the Justice Department have joined forces to attack what they say are fraudulent activities at three of the nation's largest schools.

In those cases, the Education Department has:

- Stripped all student aid from a chain of Florida trade schools where the department charged that officials had forged students' signatures on aid applications and obtained aid for students who did not qualify. The six business schools, operated by the Robert Fiance Corporation, have been barred from receiving federal student aid for a year and a half and fined $1.5-million, the largest penalty the department has ever levied against an institution. The schools received $100-million in federal loan and grant money from students over the last three years.
- Suspended aid to a chain of Florida beauty schools following the Justice Department's indictment of the chain's owner and 18 other top employees on charges of conspiring to defraud the Education Department of student-aid money. An administrative hearing regarding the suspension of the Wilfred American Educational Corporation, whose students have been re-

Continued on Page A20

Governors to Ask States to Improve International-Education Programs

By SCOTT JASCHIK

WASHINGTON

The National Governors' Association will call on state governments this week to expand and improve international-education programs.

In a report prepared for the governors' winter meeting here, the association will say that "international education must be an integral part of the education of every student," and will urge states to put more money into international education, to provide the opportunity to learn foreign languages at a younger age, and to introduce more requirements that students become proficient in geography, foreign cultures, and foreign languages.

The report says that some states, colleges, and schools have taken steps to improve international education. But it calls such efforts "pockets of progress in an otherwise indifferent America."

The report is part of the association's year-long effort, called "America in Transition: the International Frontier," to study the way states should respond to changes in the international economy.

The governors' study says international education is important for several reasons. It notes that the economic success of individual states, and the entire country, may depend on Americans' becoming more knowledgeable about the rest of the world.

Help for Poultry Farmers

The report cites numerous cases of knowledge of foreign countries leading to economic advancement at home. Virginia's Gov. Gerald L. Baliles, for example, while on a trip to Hong Kong, found out that chickens' feet are considered a delicacy there, and then helped Virginia poultry farmers, who had been discarding the feet, to sell them in Asia.

In an introduction to the report, Gover-

Continued on Page A19

JAY PAUL

Gov. Gerald L. Baliles of Virginia: "How are our firms to provide international leadership when our schools are producing insular students?"

High-School Graduates: Some States Face Sharp Drops, Others Growth

Continued from Page A1

for the State Council of Higher Education for Virginia.

"With the high-school enrollment dip and the weakened economy, we guessed that students would stay home and go to community colleges and urban institutions. We were wrong. They went away to residential institutions. We didn't expect to see community colleges lose enrollment."

The miscalculations of past enrollment changes differ from state to state, but analysts nationally say their experiences have given them the information they need to help smooth higher education's transition from the baby-boom era to the 21st century, when interstate migration and demographic patterns will alter the size and composition of high-school graduating classes.

In states facing enrollment drops, primarily those in the "rust belt," higher-education systems are developing programs to enhance college-going and retention rates, and predict that they will be able to maintain or even augment college enrollments. Mr. Alessio and his counterparts in states facing a gradual increase say they have time to prepare for the predicted mid-1990's surge in high-school graduates.

Increases in South and West

The issue is most pressing in states—mostly in the South and West—that are now expecting dramatic enrollment growth. In those states, system administrators are trying to convince state lawmakers that now is the time to lift enrollment caps, upgrade instructional programs, and expand facilities.

Until those steps are accomplished, they say, the only way they can manage growth at overcrowded institutions is by toughening admission requirements and turning away qualified applicants.

"For the next six years, I think the university system will be closed off to more and more people," says Thomas K. Wetherell, chairman of the Florida House of Representatives Appropriations Committee.

For example, Florida State University stopped accepting applications for its fall semester in early February because it already had received 12,000 applications for its freshman class of 2,700. About 1,000 of the applicants had grade-point averages of 3.8 or better.

As the competition for admission to Florida's leading universities becomes even more fierce, enrollment pressures on the state's community colleges will heighten as well, says Representative Wetherell, who is also vice-president for planning and development at Daytona Beach Community College. This year, enrollments have climbed by more than 5 per cent at 21 of the state's 28 community-college systems, he says.

Other Agencies Seek Funds

Such pressures are also expected to build in about a dozen other states that are expected to experience double-digit increases in the number of high-school graduates from 1986 to 2004, according to the Western Interstate Commission for Higher Education (*The Chronicle*, May 4, 1988).

The problem for college officials is that other state agencies are under pressure from increasing state populations and are clamoring for additional financing, as well, Mr. Wetherell says. Demands are increasing for transportation, the criminal-justice system, and senior citizens.

"We're just forced into a situation where we have to reduce the number of classes offered, and at the same time, we have to increase class sizes," Mr. Wetherell says.

Charles B. Reed, chancellor of the State University System of Florida, has tried to manage enrollment by allowing individual institutions to raise admission standards.

But even that approach has not had the effect Mr. Reed expected.

"As we increased our admission standards, we got better students and better retention rates. It has put even more pressure on us for expansion," Mr. Reed says.

Attempts to control enrollment by raising admission standards failed to keep enrollments from soaring past the 50,000 mark at the University of Texas at Austin.

"College enrollments always go up in tough times, and Texas has been going through some tough economic times," says Ronald M. Brown, vice-president for student affairs.

Administrators at the Austin campus increased admission standards last fall and will continue to tighten them in the hope of eventually reducing the enrollment to 46,000 or 47,000, Mr. Brown says.

Cuts Proposed in Texas

The overcrowding at the University of Texas at Austin and at Texas A&M University is the exception in Texas. In general, the state has the facilities it needs to accommodate the Western Interstate Commission's projections of a 22-per-cent surge in the number of high-school graduates from 1986 to 2004, says Texas Rep. Wilhelmina R. Delco.

Says Ms. Delco, chairwoman of the House Higher Education Committee: "What this state needs to do is to invest in equipment and faculty salaries. You can't mouth all the rhetoric about being an 'Education President' or an 'Education Governor' and propose cuts in education funding."

Yet that is what Texas higher-education administrators are facing. The Legislative Budget Board, an influential committee that develops a budget for the Legislature to consider, proposed a 5-per-cent cut in state financing for higher education for the next biennium.

Because of the proposed cuts, Texas officials who otherwise would be preparing for the anticipated growth in enrollment will be focusing on preventing losses this year. Other states, however, are starting the long-range planning to prepare for the onslaught of new students.

In California, David P. Gardner, president of the University of California, announced recently that the university system needed three new campuses. Although the financing is not in place, the chairman of the Assembly Subcommittee on Higher Education is drafting a $1-billion bond measure for the 1990 ballot that would provide funds for some of the expansion needed for the California Postsecondary Education Commission's estimated 30-per-cent increase in postsecondary enrollment.

And by the end of this year, the California Postsecondary Education Commission should have a comprehensive plan for expanding the state's higher-education system.

In Utah, the Board of Regents recently purchased a closed high school in Salt Lake City to convert it into a branch campus for the community-college system.

In Washington State, the Higher Education Coordinating Board is trying to persuade its Legislature to speed the development of branch campuses so that residents in Bothell, Spokane, Tacoma, the Tri-Cities, and Vancouver will have better access to upper-division programs.

The success of those efforts will largely depend on the willingness of legislators to pay for them. And legislators and college lobbyists say that obtaining additional state financial support will be difficult. Says Florida's Mr. Wetherell: "No one is prepared to pass taxes to increase funding. It's kind of like everybody wants to go to heaven, but nobody wants to die. Growth simply does not pay for itself."

20-Pct. Drop for Pennsylvania

Ironically, some of the states looking at enrollment decreases are less worried about adequate state support—at least for now.

In Pennsylvania, for example, officials predict a 20-per-cent drop in the number of high-school graduates by 1995, but no one is expecting the state to cut its support for higher education. Pennsylvania entered the fiscal year with a budget surplus, and the Governor has proposed giving higher-education an additional 7 per cent in 1989-90.

There is a continued push for additional higher-education funding because the number of applications is growing as more people decide they want a higher education, says Kerry L. Moyer, director of system research and planning for the Pennsylvania State System of Higher Education. For example, Mr. Moyer says that in 1977, 186,000 students graduated from high school and 80,000 went on to postsecondary education. Ten years later, the number of high-school graduates had dropped to 143,000, but 80,000 still went on to postsecondary education.

"Historically, the participation rates in Pennsylvania have been low, so now we're catching up," he says.

That fact has allowed Pennsylvania's public colleges and universities even to increase enrollments, as has been the case at Pennsylvania State University.

'We Stepped Up Recruitment'

Says Robert E. Dunham, vice-president and vice-provost there: "We stepped up our recruitment and marketing before we saw that slump, and I think that helped us. I wouldn't want to bet my last dollar on it, but I think we're going to weather this period pretty well."

The economic history of the rust belt is also a factor in college enrollment growth in that region, says Clyde R. Ingle, Indiana's commissioner of higher education.

"Parents tell their sons and daughters, 'I got a pretty good job at Ford, but I'm going to be replaced by a robot, so you have to go to college,'" says Mr. Ingle.

In Indiana, institutions are designing recruitment programs for ninth-graders and are working with secondary-school systems to help students get any remedial help they may need.

Similar programs are being developed in Oregon—the only Pacific Coast state to anticipate a drop in its high-school graduating-class size.

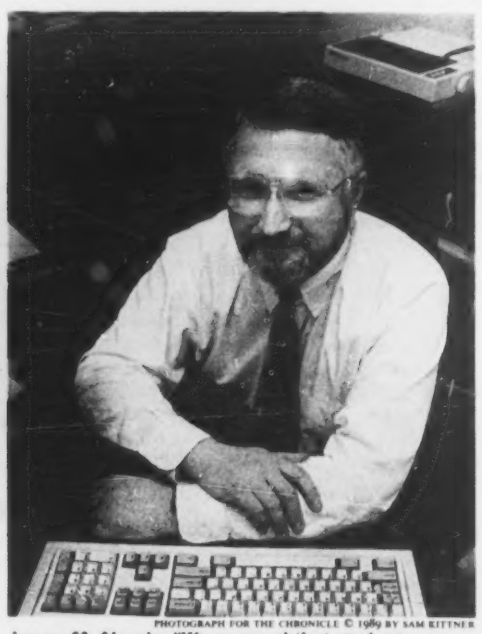
Despite that drop, higher-education enrollments have been rising, says John G. Westine, policy analyst for the Oregon Office of Education

Changes in Number of High-School Graduates, 1986-2004

SOURCE: WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

PHOTOGRAPH FOR THE CHRONICLE BY ROSE PROUSER

Kerry L. Moyer: "Historically, the participation rates in Pennsylvania have been low, so now we're catching up."



PHOTOGRAPH FOR THE CHRONICLE © 1989 BY SAM RITTENBERG

James M. Alessio: "We guessed that students would stay home and go to community colleges and urban institutions. We were wrong."

Policy and Planning. "And our current projections show virtually flat enrollments until 1996, with a slight decline in independent institutions," Mr. Westine says.

Indeed, college planners caution that past predictions of declines in college enrollments have not materialized. Says Mr. Alessio of Virginia: "If you remember, in the late 1970's you couldn't pick up a paper without reading an article about how we were all going to be without jobs. And that didn't happen."

What Will Students Decide?

Even if the huge enrollment shifts do not occur, the expected changes should prompt consideration of what students should be learning and how they are taught, says Gordon K. Davies, director of the State Council of Higher Education for Virginia. Educators need to decide whether areas of study will be combined to form new colleges and centers for learning and whether pilot programs with telecommunications will lead to new methods of teaching, he says.

The Virginia state council staff estimates that the number of high-school graduates will grow by 13 per cent by early in the 21st century. Mr. Davies says: "I'm interested in using growth to improve higher education."

But for all their planning, state officials acknowledge that because the decision to attend college is a voluntary one, no one can be sure what tomorrow's student will decide.

"You can help direct where students go, but you can't control where they go. You can put caps on institutions, but that does not change demand," Mr. Alessio says. "That's something we've come to realize."

STATE NOTES

States Start College Efforts for High-School Students

High-school students in a handful of states can now enroll in postsecondary institutions to earn credit toward graduating from high school, college, or both, according to a report recently issued by the Education Commission of the States.

The laws enacted in Arizona, Colorado, Florida, Louisiana, Minnesota, and Washington were designed to serve many purposes. Students considered likely to drop out of high school may be encouraged to remain in school by pursuing vocational degrees, and academically talented students may be rewarded by allowing them to enroll early in college courses.

The survey reported on trends in state activities that allow greater choice for public high-school students and their parents.

The college programs limit participation to students now in their junior or senior year of high school. Lawmakers in the states said they viewed those years as critical because many students choose to drop out at that age.

Some plans encourage talented high-school students to enroll at an early age in state colleges and universities. Lawmakers in the past have approved similar plans to encourage academically talented, college-age students to attend institutions in the state.

In Colorado, Florida, Minnesota, and Washington, the state pays the cost of college for high-school students participating in the programs.

According to the report, Arizona adopted its law five years ago, but most states passed bills in the last legislative session, and officials at E.C.S. have said many other states are considering adopting similar plans. —COURTNEY LEATHERMAN

Mass. Regents Seek Policy on College Trust Funds

The chairman of the Massachusetts Board of Regents of Higher Education has appointed a retired businessman to head a three-member commission to develop guidelines for the use of state-college trust funds.

William R. Thurston, former president of GenRad Inc., an electronics company, will select the panel's other two members.

The chairman of the regents, Paul E. Tsongas, a former U.S. Senator, said the commission was necessary because the trust-fund issue "is bleeding us terribly, and this is going to go on forever until there is some formal set of guidelines."

The trust funds kept by state colleges in Massachusetts come from a variety of sources, such as revenues from campus bookstores and parking lots, and are intended to be used for such "extras" as campus improvements and fees for guest speakers. However, the trust funds have been a source of continuing conflict in recent years, amid allegations that college presidents have used them improperly for their personal expenses.

In the past two years, five state-college presidents in Massachusetts have been forced to resign, at least in part because of charges they misused campus trust funds.

South Dakota State Colleges Become State Universities

With a few strokes of his pen, South Dakota Gov. George S. Mickelson turned three South Dakota state colleges into state universities.

In July Dakota State, Northern State and Black Hills State Colleges will officially change their names and move up a notch in the state's higher-education hierarchy.

"This is an opportunity for us to grow as institutions. It should help in student and faculty recruitment. We should have a better chance when competing for grants," said a spokesman for Black Hills State College.

The proposed name change was controversial (*The Chronicle*, January 25). Proponents argued that state universities receive more state support, but that was one of the key reasons why critics of so-called "name inflation" opposed the change. The critics said the state colleges did not have the academic programs to merit the designation "university."

Governor Mickelson, a Republican, vetoed an attempt to upgrade the state colleges last year, in part because of the fiscal implications, his press spokeswoman said. The measure Governor Mickelson signed specifically stated that the new state universities would not receive additional money from the state, she said.

Students at the University of South Dakota, however, still fear that the new state universities will be a drain on the state funds that their institution receives for research and graduate studies, and they have initiated a petition drive to place the name-change question on a 1990 state ballot. —MARY CRYSTAL CAGE

Texas Loan Agency Seeks to Limit Default Rates

The Texas Guaranteed Student Loan Corporation has announced measures to crack down on colleges and proprietary schools with high student-loan default rates.

Under the Texas plan, the agency will require any postsecondary institution in the state where more than 30 per cent of former students have failed to repay their Stafford Student Loans to develop plans to reduce defaults. Institutions that fail to provide the guarantee agency with plans, including information on recruiting procedures, dropout and placement rates, and course offerings, risk losing loans backed by the state agency and would be forced to send their students to agencies outside of Texas.

The state guarantee agency acts as a go-between to insure lenders that the federal government will reimburse them for any loans that student borrowers fail to repay. Texas students attending institutions that were cut off from loans guaranteed by the state agency could still take out loans elsewhere.

Texas officials and some Congressional aides, however, have said they believe other state agencies will follow with similar actions.

Currently, 85 institutions in the state have default rates that are more than 30 per cent. Seventy-five of those are for-profit trade schools. Institutions that adhere to the new procedures and still fail to reduce defaults would not be cut off from loans guaranteed by the state agency under the policy. —C.L.

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Better International Programs Sought

Continued from Page A17

nor Baliles, a Democrat who is the association's chairman, says: "How are we to sell our products in a global economy when we neglect to learn the languages of the customer? How are we to open overseas markets when other cultures are only dimly understood? How are our firms to provide international leadership when our schools are producing insular students?"

The report also maintains that Americans will benefit from more international education because they will be better able to understand the many ethnic groups in this country. Noting that 84 languages are spoken by residents of the Los Angeles area, the report says: "An increased emphasis on international education in schools and colleges will help everyone understand and interact with their neighbors, classmates, and coworkers."

More Requirements Proposed

Following are some of the specific recommendations of the report:

- Colleges and universities should require more study of foreign languages and international issues for both admission and graduation. Such requirements, the report says, will improve the quality of incoming college students and will press high schools to add more international courses.
- College departments should be required to include an "international element" in all majors. Such an element might be a language requirement, courses comparing the discipline in various countries, or study abroad.
- Business schools should require their students to learn more about other nations, and offer special courses on international subjects for those already working in business.
- States should create and finance programs that allow colleges to provide assistance on international studies to public schools.
- College students should be encouraged to study abroad.
- Teacher-education programs should require more study of geography, world history, and foreign languages. The report adds that teacher-certification tests should also require candidates to demonstrate knowledge in those areas.

The report acknowledges that governors cannot enact all of the changes overnight, or by themselves.

"States influence the direction of public colleges and universities. But there are limits to this influence," the report says. "They can not dictate the curriculum that is offered on state campuses nor mandate cooperation between the college classroom and business."

But the report goes on to say that governors are uniquely suited to promote their agenda on international education because of their current role in seeking improvements in the quality of higher education and in forging links between states and other countries.

The report recommends that governors, together with other politicians, educators, and business leaders, develop comprehensive plans for their states, including steps to improve international study at all levels of education.

The report is available for $10.95 from the National Governors' Association Publications Office, 444 North Capitol Street, Suite 250, Washington 20001-1572.

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Earmarking of Funds for Universities Questioned in Study

Continued from Page A17

is based on the more traditional, competitive review system.

About 63 per cent of the earmarked money was divided up by 10 states. Only one of the 10—West Virginia—ranks in the bottom 10 in terms of total federal research and development support.

Over all, Mr. Savage found, the 10 states that rank the lowest in overall research support have won less than 8 per cent of the money that Congress has earmarked for specific campus projects.

And some institutions, including some members of the prestigious Association of American Universities, have been winners under both systems. The association represents many of the leading research institutions in the United States. Mr. Savage found that A.A.U. members had collected about 30 per cent of all the money that Congress earmarked for universities in the 10-year period.

Mr. Savage compiled and analyzed data from legislation and lists of such projects assembled by the Congressional Research Service for most of those years.

He does not claim that his analysis includes all of the money that Congress actually earmarked for such projects. Identifying the projects is often difficult, given the dexterity of Congress in tucking obscure descriptions of such items into spending laws and the Congressional reports that accompany such laws. No single, generally accepted definition for such projects exists.

Robert M. Rosenzweig, president of the Association of American Universities, for example, says that much of the money Mr. Savage covered in his study came from the Department of Agriculture.

Long Tradition for Agriculture

Mr. Rosenzweig argues that many of those projects should not be included with the others because Congress has a long tradition of earmarking for specific universities most of the money that is available for agricultural research. He also cites the special relationship, long established in law, between the federal government and the land-grant institutions.

Some critics and supporters of the Congressional practice of earmarking say Mr. Savage's findings are not surprising.

Robert L. Park, executive director of the Washington office of the American Physical Society, has been an ardent opponent of the practice. He says the states that fare poorly under the peer-review system generally have fewer scientists and engineers and less research activity than the states that do well, making them less likely to seek earmarked money for research.

"It just sort of shows the inevitability of it," Mr. Park adds. "You can't put money where there isn't anything."

Others say the analysis demonstrates that political power, not need, is often the main determinant of which institutions and states will receive money directly from Congress. Massachusetts, for example, won the most money for earmarked projects, according to Mr. Savage's analysis. It also has had a very powerful Congressional delegation.

"The only thing earmarking tests is the political muscle of the earmarker," says Rep. Sherwood L. Boehlert, a New York Republican.

But Roy Meyers, communications director for the lobbying company Cassidy and Associates, interprets Mr. Savage's data as showing that there has indeed been a much wider geographic distribution of federal dollars through the earmarking process than under peer review. A wide range of states that normally are far down the list in terms of federal research support, including several from the South, ranked comparatively much better in the earmarking process, says Mr. Meyers, whose company lobbies for such projects.

Many institutions that receive little federal research support, he adds, are among those to which Congress has directed the most money.

Different Conclusions Drawn

Mr. Meyers, after a preliminary look at Mr. Savage's totals, also suggests that Mr. Savage's data for some of the institutions that are Cassidy clients may be inaccurate.

Another study, by undergraduate students at the California Institute of Technology, reached conclusions different from Mr. Savage's. That study examined data from just one year, fiscal 1986. It concluded that earmarked money had gone primarily to universities that could be considered have-nots.

The top 20 universities in terms of total federal support for research and development received only 1.3 per cent of all the money that was earmarked, it found. Universities that were not in the top 100 received 71 per cent of the money that Congress set aside for specific institutions.

The study, which was supervised by Bruce Cain, a professor of political science at Caltech, also concluded that the argument that earmarking channels money to states that otherwise receive little federal research money "is only partially supported by the facts." The states in that situation that benefited the most, it added, were Alabama, Florida, Mississippi, Iowa, Oregon, and South Carolina.

Eamon M. Kelly, president of Tulane University, agrees with Mr. Savage that the earmarking system does not result in an equitable distribution of federal money. (Tulane ranks 18th on Mr. Savage's list of institutions receiving earmarked money.) But neither does the peer-review system, Mr. Kelly says.

What is needed, he adds, are national programs to broaden the scientific and engineering base of the country to make sure that students throughout the United States have access to science education of high quality—and that the economic benefits of research spending are equitably distributed. A broader base is needed, Mr. Kelly says, to increase the number of scientists and engineers and to actually improve the quality of research.

Mr. Kelly and others praise a National Science Foundation program that allows the have-not states to compete for money to strengthen their ability to compete under the peer-review system. A new organization to be formed next month will lobby to expand the model to other agencies and to increase the money being spent on it. Others suggest that the government should set aside some money in research competitions for similar kinds of efforts.

"In all public policy there has to be a balance between equity and efficiency," Mr. Kelly says. "When the level of inequity is so high, it actually builds inefficiency, and you get something like the earmarking approach."

Sullivan Declines to Endorse Ban on Fetal-Tissue Research

By MARY CRYSTAL CAGE
WASHINGTON

Louis W. Sullivan, President Bush's nominee to be Secretary of Health and Human Services, said last week that he would oppose "any blanket prohibition" against fetal-tissue research, but he also declined to endorse such research efforts.

Dr. Sullivan, the president of the Morehouse School of Medicine, made his statements during a hearing of the Senate Finance Committee, which recommended that he be confirmed. The full Senate is expected to follow suit this week.

The nomination was threatened last month by a firestorm of opposition that Dr. Sullivan ignited when he reportedly said he favored allowing women to have abortions.

Subsequent statements by Dr. Sullivan that he opposes abortion have satisfied most of his critics. But a leading Senate opponent of abortion used last week's hearing to grill him about abortion and fetal-tissue research. In recent years, scientists have been using tissue from aborted fetuses to conduct research on such maladies as Parkinson's Disease, and abortion foes have pressed for a ban on the research, saying it legitimizes and encourages abortions.

Sen. William L. Armstrong, a Colorado Republican, said he could not vote for Dr. Sullivan because of his answers on the use of fetal tissue.

Moratorium to Remain Intact

Dr. Sullivan, recalling his earlier conversation with the Senator, told the committee: "I expressed reservations about any blanket prohibition on any research. I think that's very dangerous, but I was not endorsing fetal research."

Dr. Sullivan said he still stood by that position.

He said that until he has an opportunity to review the report by the 21-member National Institute of Health advisory panel, a Department of Health and Human Services moratorium on fetal-tissue research would remain intact. That ban, started last year, prohibits the use of federal funds to finance research on the transplantation of fetal tissue from abortions.

Senator Armstrong criticized his response, saying, "Basically, what you've decided to do is to not answer this committee."

Judith A. Brown, president of the American Life League, an anti-abortion organization, told the committee that Dr. Sullivan's comments were "simply another attempt to muddy the waters on his position on abortion."

None of the other Finance Committee members discussed fetal-tissue research.

On other research issues, Dr. Sullivan expressed strong support for continuing the federal effort to prevent AIDS. "We must commit the resources and the will to find a cure. American science and our scientific community must know that we have the resolve to beat this disease."

At the same time, Dr. Sullivan said, "we must not slight our efforts to conquer cancer, heart disease, diabetes, and other disorders afflicting our citizens."

Earmarked Projects by State and Institution, 1980-89

By state

1. Massachusetts	$94,216,000	17. North Dakota	$20,259,333	33. Connecticut	$3,750,000
2. New York	82,901,333	18. Oklahoma	17,515,000	34. Idaho	3,690,000
3. Oregon	78,150,000	19. Washington	15,920,000	35. Wisconsin	3,550,000
4. Florida	62,377,500	20. District of Columbia	15,020,000	36. Michigan	3,250,000
5. Illinois	60,819,000	21. Indiana	13,050,000	37. Minnesota	1,800,000
6. Louisiana	56,700,000	22. Texas	11,700,000	38. Vermont	1,450,000
7. South Carolina	37,700,000	23. Nevada	11,100,000	39. Arkansas	1,200,000
8. West Virginia	34,423,000	24. Utah	11,000,000	40. Georgia	517,000
9. Alabama	34,400,000	25. North Carolina	9,900,000	41. Virginia	450,000
10. New Hampshire	30,045,000	26. Kansas	9,321,000	42. Nebraska	315,000
11. Pennsylvania	26,800,000	27. New Jersey	8,810,000	43. Alaska	290,000
12. Hawaii	25,317,500	28. New Mexico	6,100,000	44. Missouri	225,000
13. Iowa	24,838,000	29. Ohio	5,700,000	45. South Dakota	195,333
14. Mississippi	23,426,000	30. Kentucky	5,304,000	46. Montana	50,000
15. Arizona	22,575,000	31. Rhode Island	5,000,000		
16. California	21,740,000	32. Maryland	4,350,000	Total	$907,229,999

By institution

1. Oregon Health Sciences U.	$52,400,000	47. Brown U.	$5,000,000
2. U. of Rochester	45,000,000	47. U. of New Mexico	5,000,000
3. West Virginia U.	34,023,000	49. Kansas State U.	4,930,000
4. U. of Alabama	33,800,000	50. Voorhees College	4,500,000
5. Tufts U.	33,496,000	51. Drake U.	4,200,000
6. U. of Illinois at Urbana-Champaign	32,000,000	52. U. of Nevada*	4,100,000
7. U. of Florida	31,037,500	53. Loyola U. of Louisiana	4,000,000
8. Florida State U.	30,740,000	54. U. of Idaho	3,690,000
9. Louisiana State U.	28,950,000	55. U. of Mississippi	3,650,000
10. Boston U.	27,500,000	56. U. of Wisconsin at Madison	3,550,000
11. Northwestern U.	26,319,000	57. Baylor College of Medicine	3,300,000
12. U. of Hawaii*	25,317,500	58. Purdue U.	3,250,000
13. U. of South Carolina	25,200,000	59. Brandeis U.	3,000,000
14. Iowa State U.	20,258,000	59. Columbia U.	3,000,000
15. Loma Linda U.	19,500,000	59. Loyola U. of Maryland	3,000,000
16. Rochester Inst. of Technology	15,752,000	59. U. of Texas at El Paso	3,000,000
17. Dartmouth College	15,000,000	63. Texas Tech U.	2,600,000
17. U. of New Hampshire	15,000,000	64. U. of Bridgeport	2,500,000
19. Tulane U.	14,250,000	64. Southern Illinois U.*	2,500,000
20. Catholic U.	14,200,000	66. U. of Kansas	2,391,000
21. Arizona State U.	14,000,000	67. Michigan State U.	2,250,000
22. Oregon State U.	13,950,000	68. California State U. at Northridge	2,050,000
23. Northeastern U.	13,500,000	69. East Central U.	2,000,000
24. Boston College	11,500,000	69. Mississippi Valley State U.	2,000,000
25. Washington State U.	11,095,000	69. Thomas Jefferson U.	2,000,000
26. U. of Utah	11,000,000	72. U. of Massachusetts*	1,920,000
27. U. of Oregon	10,800,000	73. Gonzaga U.	1,875,000
28. North Dakota State U.	10,359,333	74. Massachusetts Inst. of Technology	1,800,000
29. U. of North Dakota	9,900,000	74. U. of Minnesota*	1,800,000
30. Indiana U.	9,800,000	76. U. of Washington	1,700,000
30. U. of North Carolina*	9,800,000	77. Southeastern Massachusetts U.	1,500,000
32. Pennsylvania State U.	9,750,000	78. U. of Vermont	1,450,000
33. U. of Oklahoma	8,800,000	79. U. of Pennsylvania	1,425,000
34. U. of Arizona	8,575,000	80. Johns Hopkins U.	1,350,000
35. State U. of New York*	8,500,000	81. U. of Connecticut	1,250,000
36. Xavier U. of Louisiana	8,250,000	81. Delgado College	1,250,000
37. Medical U. of South Carolina	8,000,000	81. Seattle Community College	1,250,000
38. Drexel U.	7,925,000	84. U. of Arkansas*	1,200,000
39. U. of Medicine and Dentistry of New Jersey*	7,500,000	85. New Mexico State U.	1,100,000
40. Mississippi State U.	7,450,000	86. Texas A&M U.	1,050,000
41. Oklahoma State U.	6,715,000	87. Eastern Michigan U.	1,000,000
42. U. of Nevada at Las Vegas	6,000,000	87. U. of Nevada at Reno	1,000,000
43. Temple U.	5,700,000	87. Oregon Graduate Center	1,000,000
44. Ohio State U.	5,500,000	Other (less than $1-million each)	26,083,333
45. Cornell U.	5,349,333		
46. U. of Kentucky	5,304,000	Total	$907,229,999

* Specific campus not identified.
Note: Colorado, Delaware, Maine, Tennessee, and Wyoming are not included in the state list because they did not receive any earmarked funds.

SOURCE: JAMES SAVAGE, THE OFFICE OF THE PRESIDENT, UNIVERSITY OF CALIFORNIA

Students

College Tuition Seen Likely to Outpace Inflation for 9th Straight Year

Continued from Page A1

ue to outrun inflation in the next few years, if not longer.

"It's the nature of the business," explained D. Kent Halstead, director of Research Associates of Washington. "Colleges will raise costs because they want to improve quality. Higher education has to stay at the cutting edge, and that costs money, lots of money."

Even though costs are rising, Mr. Halstead believes that a college education will remain within reach. "The vast majority of students are not paying astronomical costs," he said, noting that about 80 per cent of all students attend public institutions, which receive large subsidies from state and local governments. This year, tuition and fees average $1,566 at public four-year institutions and $767 at public two-year colleges, according to the College Board.

Mr. Halstead added that tuition increases at public colleges would nevertheless cause some pain among students and their parents. "Customers are used to paying a very low fee for their public services, or none at all."

Learning From Demographics

Private colleges will probably raise tuition 3 to 4 percentage points beyond inflation just to pay for current academic programs and to make up for shortfalls in federal student aid, said Julianne Still Thrift, executive vice-president of the National Association of Independent Colleges and Universities. Any new programs, she said, would add even more to cost increases.

Tuition for this academic year averages $7,693 at private four-year institutions and $4,564 at private two-year colleges.

Arthur M. Hauptman, a consultant who is preparing a study on college costs for the American Council on Education and the College Board, believes demographics are one key to understanding why costs have surpassed inflation in the 1980's. It is no coincidence that tuition began to rise rapidly at the same time as the traditional college-age population began to fall, he said. To fill their classes, colleges have spent more on recruiting and on support services for nontraditional students.

Institutions have also been strapped because enrollments have grown only slightly since 1980, making it difficult to spread fixed costs over more students, he added.

The widening gap between the earnings of high-school graduates and college graduates also plays a role in tuition increases, Mr. Hauptman said. "The added rate of return adds to the demand for higher education, and that, in turn, leads to an ability to set prices higher," he said.

'Stranded and in Trouble'

While the public has appeared willing to accept tuition increases so far, David W. Breneman, president of Kalamazoo College, worries that private institutions might price themselves out of the market. "If we continue this process for another decade, we set up a marvelous situation for the public sector, which is getting qualitatively better and in many ways enhancing itself," he said. "At each point we go up in posted price by 10 per cent, we lose part of our pool." Some private colleges may find themselves "stranded and in trouble," he warned at the annual meeting of the American Council on Education.

Few countervailing pressures exist to keep public-college tuitions down, according to James R. Mingle, executive director of the State Higher Education Executive Officers association. He said that only a handful of states have effective student lobbies, that the number of state legislators who see themselves as "protectors" of low tuition has dropped, and that Education Secretary Lauro F. Cavazos has not pressed the cost issue as did his predecessor, William J. Bennett.

Asked about the tuition outlook for next fall, Mr. Cavazos issued a statement last week that expressed concern about rising tuition and called on colleges to "make every effort" to keep costs down.

He added: "As a former university president, I have firsthand experience with the tremendous challenges faced by higher-education administrators in meeting rising costs while at the same time keeping tuition within potential students' reach. Each institution must identify the best way for it to meet those challenges, depending on its own particular situation. But the bottom line must always be: What's in the best interest of the students?"

Jumps at Some Public Colleges

While public institutions typically wait to see how their budget requests fare in state legislatures before setting tuitions, early announcements indicate that undergraduates in some states will face large percentage increases this fall:

- In-state fees at the University of California will rise 9.3 per cent, to $1,697. Tuition and fees for non-residents will jump 17.9 per cent, to $7,496.
- At the 37 public senior institutions in Texas, resident tuition will rise 12.5 per cent, to $540.
- In a move that has generated protest among some students and legislators, the Oklahoma State Regents for Higher Education announced double-digit tuition increases as part of a four-year plan to raise revenue for quality improvements. At the University of Oklahoma and Oklahoma State University, resident tuition for freshmen will rise 19.7 per cent, to $1,239. Tuition for freshmen at the state's other four-year colleges will rise 19.1 per cent to $1,054, and students at the state's public two-year colleges will pay $699, a 16.5-per-cent increase.

In the Maricopa County (Ariz.) Community College District, tuition for county residents will rise just 2.2 per cent, to $705. Maricopa's vice-chancellor for business services, Dan S. Whittemore, considers that low increase "a one-time opportunity" for students. He expects future increases to be much higher, saying that tax limitations have hampered the district's ability to raise money from property taxes.

New Pricing Policy

Next fall several private universities plan to institute a new pricing policy that will feature sharply higher costs for freshmen and lower increases for returning students.

At Seton Hall University, for example, upperclassmen will pay $8,250, 10.8 per cent more than this year, while freshmen will pay $8,900, a 19.6-per-cent increase. James O. Allison, executive vice-chancellor, said the increases were needed to finance new residence halls and programs to help freshmen adjust to college, among other things. He said that even with the steep price rise, Seton Hall's charges would be similar to those of "peer" institutions with which it competes for students. Applications for the freshman class are up 20 per cent, he added.

Lower Rates at Suomi College

At George Washington University, tuition will rise 20.1 per cent for freshmen, to $11,500, and will increase 10 per cent for upperclassmen, to $10,530. The added revenue will cover a deficit in the current operating budget and pay for faculty-salary increases, library purchases, and other items, said Robert A. Chernak, vice-president for student- and academic- support services.

The following is a sampling of undergraduate tuition and required fees for 1989-90: Brown University, up 7.5 per cent to $14,790; Dartmouth College, up 8.3 per cent to $14,445; Kalamazoo College, up 9 per cent to $10,686; Lehigh University, up 8.8 per cent to $13,550; Saint Louis University, up 9 per cent to $7,720; Suffolk University, up 7.4 per cent to $7,300; Walsh College, up 11.7 per cent to $5,184; and Washington University, up 9.2 per cent to $13,736.

At least one college intends to break the back of tuition inflation by lowering costs significantly. At Suomi College, tuition will drop to $6,900 from $8,300. Robert Ubbelohde, Suomi's dean of the faculty, said the college had cut its budget by reorganizing the staff and eliminating 19 positions, mostly through attrition, and by adopting such measures as reducing printing expenditures and serving less food at faculty meetings.

Year-by-Year Increases in Tuition and Fees at 4-Year Institutions

	Public	Private
1978-79	5%	7%
1979-80	6	9
1980-81	4	10
1981-82	16	13
1982-83	20	13
1983-84	12	11
1984-85	8	9
1985-86	9	8
1986-87	6	8
1987-88	6	8
1988-89	5	9

SOURCE: COLLEGE BOARD

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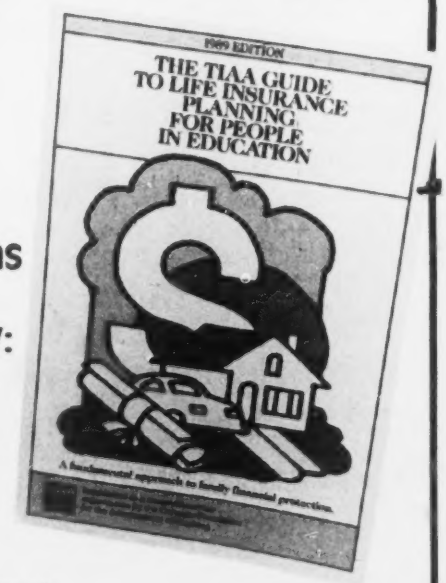
1989 EDITION
THE TIAA GUIDE TO LIFE INSURANCE PLANNING FOR PEOPLE IN EDUCATION
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It will help you answer these important questions about planning your family's financial security:

- What is my primary asset?
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